

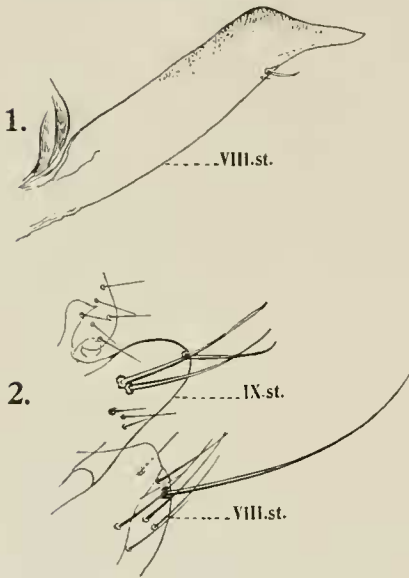
TWO NEW AMERICAN FLEAS.

BY DR. KARL JORDAN.

(With 2 text-figures.)

1. *Cediopsylla spillmanni* sp. nov. (text-fig. 1).

♂♀. Close to *C. simplex* Baker 1895, but the upper genal spine separated from eye; angle of frons farther down; sternite VIII of ♂ much broader, almost devoid of bristles; head of spermatheca larger.



Frontal angle in ♂ above, at or below three-fifths, in ♀ in or somewhat below middle, whereas in *C. simplex* the angle is placed at three-fourths in ♂ and at five-eighths in ♀. Internal incrassation at anterior oral angle resembling an Indian club (lateral aspect), more gradually widening than in *C. simplex*. Genal comb with 7 or 8 spines, interspace between eye and upper spine about equalling the breadth of this spine, much smaller than in *C. inaequalis* Baker 1895. Frontal comb with 13 to 16 spines, usually 15 or 16.

Genitalia: similar to those of *C. simplex*.—♂ differs especially in sternite VIII (text-fig. 1) being of nearly even width to apical third (measured along dorsal side), thence strongly but

gradually narrowing to a point, the apical portion slightly curved downwards; no bristles except 1 to 3 short ones at ventral margin, the distal one being slightly spiniform, but very pale.—In ♀ the head of spermatheca one-fourth broader than in *C. simplex*.

Hab. Ecuador: Pichincha, off *Sylvilagus caudatus*, December 1927 (Professor F. Spillmann), a series.

The discovery in Ecuador of a species closely agreeing in nearly every detail with the rabbit flea of the Eastern United States is most interesting and surprising, and may be taken as evidence that *Cediopsylla* occurs also in Central America, whence hardly any fleas (of wild mammals and birds) are known.

2. *Ceratophyllus gladiolis caducus* subsp. nov. (text-fig. 2).

♂. As in *C. g. gladiolis* Jord. 1925, from California, the hindtarsal segment I has a subapical and an apical bristle which reach beyond II; the longer of the two bristles in the second notch from apex does not nearly extend to apex of I, whereas in *C. g. gladiolis* ♂ it reaches to near apex of II. Exopodite F a little

broader than in *C. g. gladiolis* ; anterior angle of paramere slightly less projecting ; the pair of sword-like bristles on ventral lobe of sternite IX (text-fig. 2) less proximal, their distance from apex shorter than segment IV of hindtarsus, in *C. g. gladiolis* longer than that segment, the lobe also narrower in *C. g. caducus* than in *C. g. gladiolis*.

♀. Pygidium as long as, or about one-twelfth shorter than its distance from stylet ; in *C. g. gladiolis* about one-twelfth longer than this distance.

Hab. Utah : Vernal, off *Ammospermophilus leucurus cinnamomeus*, November 1927 (A. W. Moore), 3 ♂♂, 8♀♀, type (♂) in U.S. National Museum.
